

CASE STUDY

City of Greater Geelong



'A Game Changer for Us'

Building a strong relationship with Mandalay to overcome challenges

CLIENT

City of Greater
Geelong
VIC



REQUIREMENT

To solve a significant illegal dumping problem occurring at Banana's unsecured & remote waste transfer stations.

SOLUTION

naus Platform
Facility Product Suite
Facility Core Product
Automation
Facility Analytics & Reporting

Overview

While the City of Greater Geelong may have been one of our earliest clients to use Mandalay software across a number of sites, this case study focuses on the introduction of their Anakie Garden Organics Processing Facility in 2018. We had the pleasure of talking with Geelong's Market Development Team Leader Andrew Lucas about their journey.

Geelong has a population of 250,000 people. Despite the population size, the municipality's boundaries are quite big for a local government area, with a land size similar to Brisbane. Since introducing the Green Bin, the response has been very positive from residents with larger volumes collected than originally anticipated.

The garden organics site currently has two Driver Control Stations (DCS) in place (one situated on inbound, and one situated on outbound) and a POS console. They are using Mandalay's ticketing system within the [Facility Product Suite](#) and they are in the process of implementing Dallas tags for all vehicles to create a fully automated and unattended gatehouse operation. They are currently utilising web-based reporting and will start using the [Facility Analytics and Reporting](#) product in the near future.



The Situation

The City of Greater Geelong was an early introducer of a green bin service in 2004. Over the years, the organic green bin materials were taken to various contractors (composting facilities), however they soon came across issues with certain facilities closing, which became problematic. In a move to preserve cell space at their landfill and to ensure there was a place to process the organic material, Council looked to secure a dedicated receival site for garden organics. This was a necessary step as they were retrieving massive quantities of garden organics with volumes close to 40,000 tonnes per annum. Geelong also has neighbouring councils interested in utilising this site.

Council secured a site, leased the land, and began planning in 2014/15. The facility was built in 2018 and opened for operation in February 2019.



The Goals / Objectives

The overall target for the garden organics site project is to ensure the material never goes to landfill and to process as much as possible into quality products. As a non-commercial business, they are not pressured by the need to seek gate fees whereby the product moves offsite as quickly as possible. This allows for far longer compost maturation which means the end products are more stable and of a higher grade than most facilities.



'If we can automate the weighbridge work, it reduces the chance of human error.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong

Requirements

Mandalay's story with this site started when a weighbridge was required. City of Greater Geelong already had two other facilities utilising Mandalay's software for ticketing, so it was the obvious choice for them.

There was no immediate pressure to have the Mandalay system up and running as material was and continues to be weighed at Geelong's Transfer Station prior to arriving at the site. In addition, there were several challenges they needed to work through in relation to the location and setup of the facility.

They also required the site to be **fully automated** as they do not have the quantity of trucks coming through to justify having a weighbridge attendant.

The Challenges

Since the start of the journey with this new site, an extensive number of challenges needed to be overcome. According to Andrew, it seemed like anything that could go wrong did go wrong. Whenever an issue came up, multiple things could have been the source of the problem, resulting in ongoing frustrations for the Geelong team.

A significant challenge with this facility is power as it is **not connected to mains power**. They initially installed a generator that would intermittently cut out and even when the generator was running, the site would experience fluctuations in power. This has resulted in multiple operational issues including fried hardware and PCs.

Another challenge they faced related to a faulty **load cell**. Even though new hardware had been installed, weight readings continued to display incorrectly in the system. Diagnosing the problem meant ruling out issues within the Mandalay system and Council's network before reaching out to the hardware supplier.

Other challenges have included **manual invoicing** processes resulting in a high risk of human error, having to setup **sales contracts** so product could be sold and **troubleshooting** via Council's virtual private network (VPN) which often made issues difficult to isolate.



'When Andy and Brendon stood up and said, all right let's grab this by the horns, that made a massive difference. I think also with Andy having experience with local government, he understood how difficult it was to work internally, so yeah, it's been really good.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong

The Solution

Building a Strong Relationship

Mandalay's Head of Facilities, Andy McDougall, and Head of Customer Success, Brendon Horswell, stepped in to strengthen the relationship with the Geelong team. Andrew Lucas says that Andy and Brendon have been game changers for them.

With the continual challenges faced by this site, building a strong relationship with Mandalay has been a significant factor in helping them move forward. With each new hurdle, Andrew soon realised that they were going around in circles, only to identify that a problem they were experiencing may have nothing to do with software. Having Mandalay to actively help them rule out software as a possible cause for certain problems allowed them to communicate with other parties and potential sources of their problems with confidence.

'Brendon was able to say everything is fine from Mandalay's perspective, you need to sort this list of things out. And that gives us ammunition to go to our other contractors to sort things out.'

- Andrew Lucas

Regular Communication and Support

Normally once a project is live, requests for support are managed via the support team and Mandalay's Customer Service Portal (powered by Zendesk). However, prior to the garden organics facility going live and reaching a business-as-usual status, Andrew and his team were not at the point where they could report issues via the normal support process. Because of this, Andy and Brendon at Mandalay ramped up communication with regular emails, phone calls, and video conference calls over Microsoft Teams. The frequency of this communication then changed as the situation at the site evolved.



'It's a great system in that you can run a report and it's like well, the weighbridge doesn't lie as opposed to submitting your own spreadsheets. The more we can lump in it the better from my perspective.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong

Because of their regular communication, both Andy and Brendon have a detailed knowledge of the facility and understand the history of all the challenges that the Geelong team have faced. Therefore, they have been able to jump in and offer immediate guidance without the need to run through a diagnostic process first.

Stable Power

Solar panels and industrial batteries (Tesla Powerwalls) have recently been installed in addition to the generators and are working towards solving the issues associated with power outages. This combination powers both the site and office. A UPS has also been installed on each device within the office to help even out any power fluctuations they experience.

Invoicing Improvements

Andrew would like to get to the point where they can use the Mandalay system to deal with financial transactions and reduce the human error resulting from the current manual invoicing process.

'We want the Mandalay system to work because we can just circumvent that whole process to link up the billing and gain multiple efficiencies as well as reduce any chance of human error.'

- Andrew Lucas

Reliable Reporting

It has been important for them to have a reliable reporting system they can depend on. They see value in having an online reporting system where external parties are less likely to question the data in the reports.

The Outcome

Andrew Lucas says that they have gone from a satellite site that is a bit bespoke and has had multiple problems to now being at the point where Brendon and Andy are preparing a status report on where they are at and are providing options on what more they can do.



'You guys are solving the problems and showing what else you can do for us to fix the problems.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong

The system has been used for a couple of years now and Geelong has been recording data on the bridge (outbound) despite the challenges they have faced. Andrew agrees there are still a few kinks to be ironed out and there is much to be done as the process of automating the site is still ongoing at this stage.



Key Learnings & Advice

Andrew believes that in retrospect, it would have been better to spend more time in the design stage. At the time they were not selling product yet, and it was not fully operational, so he thinks it was premature. They would have benefited from looking at other similar operational sites to understand what it was like.

They found it hard not having much experience managing a project like this, so they highly recommend utilising Mandalay's project managers throughout the process leading up to going live. Having a single point of contact to interpret across sectors has been highly valuable to them.

His advice for any current or future customers of Mandalay is to **find the right people in Mandalay and get them to help you.**

The consistency of having a couple of go-to staff has been excellent for them. Even though Brendon and Andy came along about $\frac{3}{4}$ of the way through the implementation process, they could look back at what was important and see what we can do from here.

'It's about relationships. It's old and cliché, but it's about having a point of contact that's consistent and taken ownership. This has been a game changer for us.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong



'The good thing about TLC from Andy and Brendon is previously I was backing away from doing anything extra. Because those guys have been taking us through it and ticking things off one at a time, you do start to think that we can dare to do a little bit more.'

Andrew Lucas,
Market Development
Team Leader,
City of Greater Geelong

The Future for the Geelong Garden Organics Processing Facility

Circular economy is a big thing for this region, which is why the future goals for the Geelong garden organics facility is to **improve the product quality** and continue to **expand the facility** to fit more materials.

Once the final challenges are resolved and the site is fully operational, they look forward to having a **fully automated system** in place where the site will continue to operate while unattended. They also want to work towards getting **more value out of the data** in the near future.

They already understand that data is going to be really important. Andrew agrees that everyone can see that data is king and they want to be all over it. Internally this hadn't been given the priority it should have, and the good thing with Brendon and Andy at Mandalay (according to Andrew) is that they have brought back the bigger picture.



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